UNITED STATES NAVAL OBSERVATORY

CIRCULAR NO. 4

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POSITIONS, AREAS, AND COUNTS OF SUNSPOTS

MAY - JULY, 1948

By Lucy T. Day

All measurements and spot counts were made at the Naval Observatory from plates secured either in Washington, or at Mt. Wilson. Difference in longitude is measured from the central meridian, positive toward the west; latitude is positive toward the north. Areas are corrected for foreshortening and expressed in millionths of the sun's hemisphere. For each date at the bottom of the columns headed: Mt. Wilson group number, difference in longitude, latitude, area of spot or group, and spot count are included respectively: number of groups, assumed longitude of the central meridian, assumed latitude of the center of the disk, total area of spots and groups, and total spot count. The date is expressed in Universal Time. The observatory at which the plate was secured and its quality are indicated directly below this date. (NO stands for U. S. Naval Observatory, MW for Mt. Wilson Observatory; and the symbols VG, G, F and P mean very good, good, fair and poor respectively.) Spots not assigned a number at Mt. Wilson are indicated by an asterisk. Corresponding data were published in the Monthly Weather Review from February 1927 to December 1947. Since December 31, 1947 they are published monthly in this series of circulars.

Date U.T. May	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Heliographic Distance from center of disk °	Area of spot or group	Spot count
1.595 MW-F	9182	−22	−17	25	73	9
	9179	−11	+17	24	485	1
	9177	− 1	+17	21	61	1
	9176	+ 5	−20	17	24	3
	9176	+10	−18	18	388	4
	9181	+ 7	+16	22	6	1
	9174	+23	+11	27	339	1
	9178	+27	−27	35	73	2
	9178	+30	−25	36	97	10
	9184	+32	+17	38	24	2
	9183	+34	+27	45	48	7
	9167	+69	+23	72	48	2
	9167	+71	+20	74	121	1
	9167	+75	+23	77	533	1
	9167	+76	+24	78	48	1
	(10)	(330)	(−4)		2,368	46
2.579 MW-VG	9182	− 7	−17	16	24	3
	9179	+ 1	+15	19	12	2
	9179	+ 2	+17	21	533	1
	9177	+12	+17	23	61	2
	9176	+20	−17	24	97	9
	9176	+22	−18	25	242	1
	9186	+24	+12	28	24	6
	9174	+37	+11	40	242	1
	9178	+40	−28	46	24	3
	9178	+47	−25	50	48	4
	9183	+43	+29	53	48	6
	9183	+48	+27	56	97	1
	9184	+45	+17	50	24	4
	(9)	(317)	(−4)		1,476	43
3.590 MW-G	9190	−88	− 9	88	679	2
	9189	−75	− 8	75	97	3
	9188	−38	+ 7	40	12	3
	9182	+ 5	−17	13	24	8
	9179	+13	+15	23	12	4
	9179	+15	+17	25	485	1
	9177	+26	+17	34	73	1
	9187	+34	−11	35	6	3
	9176	+34	−17	36	73	10
	9176	+37	−18	39	291	1
	9186	+38	+12	42	97	11
	9174	+50	+11	52	242	1
	9178	+52	−28	55	48	7
	9178	+61	−26	63	24	6
	9183	+55	+29	63	24	1
	9183	+60	+27	66	61	1
	9184	+60	+15	62	36	3
	(13)	(304)	(−4)		2,284	66
4.628 NO-F	9190	−78	− 9	78	776	5
	9190	−68	− 9	68	291	1
	9194	−77	−13	77	291	1
	9193	−65	+17	69	24	3
	9189	−58	− 7	58	97	10
	9192	−11	+14	22	12	2
	9182	+17	−17	22	48	5
	9179	+29	+17	35	485	1
	9177	+39	+17	44	61	1
	9191	+41	+23	48	6	1
	9186	+49	+13	51	24	1
	9186	+56	+11	57	97	1
	9176	+50	−18	51	242	4
	9174	+63	+11	65	194	1
	9178	+75	−25	75	48	2
	(13)	(290)	(−4)		2,696	39
5.632 NO-F	9198	−80	−15	80	48	1
	9197	−75	+18	77	242	1
	9194	−72	−13	72	242	9
	9194	−63	−13	64	242	1
	9190	−64	− 9	64	776	3
	9190	−54	− 9	54	436	2
	9193	−51	+18	55	24	4
	9189	−45	− 7	45	145	15
	9196	−32	+11	34	97	6
	9195	−14	+ 9	20	24	3
	9192	+ 3	+13	16	12	1
	9182	+30	−17	32	194	10
	9179	+42	+16	46	388	1
	9179	+43	+15	47	97	1
	9177	+51	+16	55	48	1
	9186	+63	+12	64	48	2
	9186	+70	+11	72	73	1
	9176	+63	−19	63	242	3
	9174	+77	+10	78	73	1
	(15)	(277)	(−4)		3,451	66
6.642 NO-G	9200	−78	−27	78	194	1
	9199	−78	−19	78	97	2
	9199	−76	−25	76	1,551	6
	9197	−70	+19	73	48	1
	9197	−62	+17	64	291	1
	9198	−68	−15	68	145	1
	9194	−59	−13	59	158	7
	9194	−49	−13	50	291	1
	9190	−50	− 9	50	776	1
	9190	−45	−10	45	97	5
	9190	−40	−10	40	339	3
	9193	−37	+13	41	48	2
	9193	−36	+17	42	61	6
	9189	−31	− 7	31	73	5
	9196	−18	+11	24	97	10
	9195	− 1	+ 8	12	48	9
	9182	+44	−17	45	242	24
	9179	+53	+18	57	12	1
	9179	+55	+16	58	388	1
	9179	+59	+13	61	73	1
	9177	+63	+15	66	48	1
	9176	+77	−19	77	291	2
	(14)	(263)	(−4)		5,368	91
7.733 NO-G	9202	−75	−19	75	97	1
	9200	−64	−28	67	194	1
	9199	−63	−20	63	194	6
	9199	−62	−25	63	1,406	1
	9199	−59	−18	60	48	1
	9197	−53	+19	57	97	10
	9197	−47	+17	51	218	1
	9198	−53	−16	54	61	4
	9194	−45	−13	46	36	1

Date U.T. May	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9194	−39	−11	40	97	10
	9194	−35	−13	36	194	1
	9201	−43	−18	44	12	1
	9190	−36	− 9	37	533	1
	9190	−29	−10	30	97	2
	9190	−27	− 9	28	291	1
	9193	−22	+18	30	24	7
	9193	−20	+13	26	12	1
	9189	−17	− 7	17	48	14
	9196	− 4	+11	14	218	15
	9195	+12	+ 9	17	48	6
	9195	+17	+ 8	22	48	3
	9182	+58	−17	60	194	7
	9182	+61	−17	62	194	1
	9179	+70	+17	71	388	1
	9177	+76	+15	77	97	2
	(15)	(249)	(−3)		4,846	99
8.629	9204	−80	+10	80	242	3
N O-F	9204	−78	+ 7	78	145	1
	9204	−77	+10	77	291	2
	9202	−61	−20	63	194	1
	9200	−51	−28	55	194	1
	9199	−50	−20	52	97	4
	9199	−49	−25	52	1,212	12
	9199	−43	−22	46	242	2
	9197	−41	+20	46	145	7
	9197	−36	+18	42	97	6
	9197	−34	+18	40	242	1
	9198	−39	−15	41	97	4
	9194	−31	−13	33	24	4
	9194	−25	−11	26	97	2
	9194	−22	−13	24	194	1
	9201	−30	−18	33	12	1
	9190	−23	− 9	24	533	1
	9190	−17	− 9	18	145	7
	9190	−13	− 8	13	242	1
	9203	−13	− 3	13	97	8
	9193	− 7	+13	17	12	1
	9193	− 6	+18	22	12	2
	9189	− 3	− 5	3	24	5
	9196	+ 8	+11	16	291	5
	9195	+25	+ 9	28	73	5
	9195	+30	+ 7	32	73	2
	9182	+65	−17	65	48	4
	9182	+68	−12	68	24	1
	9182	+75	−15	75	194	1
	9179	+85	+16	85	388	1
	(16)	(237)	(−3)		5,681	96
9.673	9205	−85	− 9	85	582	1
N O-VG	9205	−77	− 8	77	582	1
	9204	−68	+ 9	69	48	1
	9204	−65	+11	66	291	10
	9204	−63	+ 7	64	194	1
	9204	−62	+11	64	48	1
	9202	−52	−20	54	24	1
	9202	−47	−20	49	194	4
	9200	−38	−28	42	145	1
	9199	−37	−19	39	73	5
	9199	−36	−24	40	1,067	13

Date U.T. May	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9199	−32	−21	36	194	3
	9199	−28	−21	32	291	5
	9197	−29	+20	36	242	10
	9197	−23	+18	32	145	16
	9197	−20	+19	30	242	1
	9198	−26	−13	27	218	13
	9201	−13	−19	21	12	3
	9194	−12	−13	16	73	9
	9194	−11	−11	13	97	5
	9194	− 9	−13	13	170	1
	9190	−11	− 7	12	485	1
	9190	− 5	− 9	8	48	1
	9190	0	− 9	5	485	4
	9203	+ 1	− 4	4	291	9
	9193	+ 7	+16	20	24	2
	9189	+10	− 6	11	24	10
	9196	+21	+12	26	145	13
	9196	+27	+12	31	194	1
	9195	+38	+10	40	48	3
	9195	+43	+ 9	44	24	4
	(15)	(223)	(−3)		6,700	153
10.652	9205	−72	− 9	72	485	1
N O-G	9205	−64	− 8	64	485	1
	9204	−54	+ 9	55	291	8
	9204	−49	+ 7	50	218	1
	9204	−48	+11	50	48	1
	9202	−40	−20	42	61	2
	9202	−33	−20	37	194	1
	9200	−27	−28	36	291	5
	9199	−23	−19	28	97	7
	9199	−22	−23	29	921	8
	9199	−19	−21	26	339	10
	9199	−14	−21	23	242	2
	9197	−17	+21	29	242	9
	9197	−10	+18	23	121	7
	9197	− 7	+18	24	388	5
	9198	−13	−15	17	145	4
	9198	−10	−13	13	121	6
	9201	0	−19	16	6	1
	9194	+ 3	−11	8	97	14
	9194	+ 5	−12	11	97	1
	9190	+ 3	− 7	5	388	4
	9190	+ 9	− 8	11	36	1
	9190	+13	− 9	14	485	4
	9203	+13	− 5	13	242	8
	9193	+16	+15	24	12	1
	9189	+27	− 7	28	24	5
	9196	+35	+11	37	145	8
	9196	+40	+11	42	242	1
	9195	+54	+10	55	97	4
	(14)	(210)	(−3)		6,560	130
11.649	9208	−78	−19	78	291	4
N O-G	9205	−58	− 9	58	485	1
	9205	−51	− 8	51	485	1
	9204	−40	+ 9	41	218	12
	9204	−36	+10	38	48	1
	9204	−36	+ 7	37	194	1
	9202	−28	−20	32	24	2
	9202	−20	−20	26	194	1
	9200	−14	−28	29	291	5

Date U. T. May	Mount Wilson group No.	Heliographic Difference in longitude	Heliographic Latitude	Distance from center of disk	Area of spot or group	Spot count
		o	o	o		
	9207	−10	−11	13	16	1
	9199	− 9	−23	22	921	7
	9199	− 8	−22	20	388	11
	9199	0	−21	18	194	6
	9198	+ 1	−15	13	97	7
	9198	+ 4	−11	9	73	12
	9197	− 5	+21	24	194	9
	9197	+ 3	+19	22	97	6
	9197	+ 7	+18	23	436	1
	9190	+17	− 7	17	388	17
	9190	+26	− 9	27	485	4
	9194	+18	−14	22	73	1
	9203	+28	− 5	28	436	12
	9193	+30	+14	35	12	6
	9196	+48	+11	50	194	10
	9196	+54	+11	56	291	1
	9206	+58	−16	59	24	4
	9195	+67	+ 9	68	97	5
	(16)	(197)	(−3)		6,646	148
12.644	(*)	−75	−22	75	12	1
N O-G	9208	−64	−19	65	158	8
	9205	−44	− 9	44	485	1
	9205	−38	− 8	38	485	2
	9204	−26	+ 9	29	194	9
	9204	−23	+10	22	36	1
	9204	−23	+ 6	25	194	1
	9202	−15	−20	22	24	5
	9202	− 6	−20	18	194	1
	9200	− 1	−28	25	291	8
	9199	+ 3	−19	16	12	1
	9199	+ 5	−24	22	921	13
	9199	+ 6	−22	20	339	9
	9199	+13	−21	22	97	6
	9197	+ 9	+21	25	97	4
	9197	+17	+18	26	24	9
	9197	+20	+18	30	436	1
	9198	+16	−15	21	97	10
	9190	+30	− 7	30	339	7
	9190	+40	− 9	40	388	1
	9194	+31	−14	33	73	5
	9203	+42	− 5	42	339	8
	9193	+43	+15	47	194	9
	9196	+61	+15	63	194	4
	9196	+68	+11	67	145	5
	(14)	(184)	(−3)		5,768	129
13.574	9210	−66	− 7	66	24	4
MW-VG	9208	−53	−19	55	73	6
	9208	−49	−19	51	85	10
	9209	−42	−15	43	36	9
	9205	−32	− 9	33	485	15
	9205	−25	− 8	26	388	5
	9211	−27	+ 7	30	12	4
	9204	−12	+ 9	16	194	16
	9204	− 8	+ 5	12	194	1
	9202	+ 7	−20	18	194	1
	9202	+ 9	−20	19	12	8
	9200	+12	−28	28	291	10
	9199	+17	−24	26	824	12
	9199	+19	−22	26	339	32
	9199	+25	−21	30	97	8
	9197	+20	+20	32	73	10
	9197	+32	+18	38	388	1
	9198	+27	−15	30	73	8
	9190	+42	− 7	42	242	15
	9190	+51	− 9	51	388	1
	9194	+43	−14	44	73	6
	9193	+55	+16	58	97	10
	9193	+59	+16	61	145	1
	9203	+56	− 5	56	388	8
	9196	+72	+13	72	24	2
	9196	+83	+11	83	339	2
	(16)	(172)	(−3)		5,478	205
14.633	9210	−52	− 6	52	12	1
N O-F	9208	−41	−19	43	61	4
	9208	−35	−19	38	61	2
	9209	−27	−13	30	145	7
	9205	−19	−10	20	436	5
	9205	−11	− 9	12	388	6
	9204	+ 3	+10	13	97	10
	9204	+ 5	+ 6	11	194	2
	9202	+21	−20	26	194	1
	9200	+26	−28	35	242	5
	9199	+30	−24	36	776	5
	9199	+33	−21	37	242	14
	9199	+37	−17	39	48	1
	9199	+41	−20	44	36	1
	9197	+33	+22	41	48	5
	9197	+45	+18	50	291	1
	9198	+46	−13	47	24	2
	9190	+55	− 7	55	73	1
	9190	+59	− 8	59	12	1
	9190	+65	− 9	65	388	1
	9194	+58	−15	60	48	1
	9193	+68	+16	69	145	1
	9193	+73	+16	74	145	1
	9203	+70	− 5	70	291	4
	(14)	(158)	(−3)		4,397	82
15.662	9210	−39	− 9	39	24	2
N O-F	9208	−27	−19	31	97	6
	9208	−21	−19	26	48	2
	9209	−17	−13	21	48	2
	9209	−11	−12	14	73	3
	9205	− 5	− 9	8	436	8
	9205	+ 3	− 8	6	315	4
	9204	+15	+10	20	48	4
	9204	+19	+ 6	22	194	1
	9202	+33	−20	36	170	1
	9200	+40	−28	46	170	6
	9199	+43	−24	47	848	10
	9199	+45	−22	47	97	8
	9199	+53	−22	55	48	1
	9197	+60	+18	62	388	1
	9198	+60	−12	61	24	1
	9190	+68	− 7	68	97	4
	9190	+79	−10	79	388	2
	9194	+71	−14	71	48	2
	9193	+81	+16	82	97	1
	9203	+82	− 5	82	194	1
	(14)	(144)	(−3)		3,852	70

Date U.T. May	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
16.628 MW-G	9212	−63	+17	65	6	1
	9210	−27	− 9	28	24	7
	9208	−13	−19	21	73	12
	9208	− 9	−19	20	48	1
	9209	− 2	−13	12	97	24
	9205	+ 9	− 9	11	388	20
	9205	+13	− 9	15	145	1
	9205	+14	− 7	14	48	10
	9205	+17	− 8	19	97	1
	9204	+32	+ 6	33	194	1
	9202	+45	−20	47	121	1
	9200	+52	−29	57	97	1
	9199	+55	−24	57	727	1
	9199	+55	−25	58	97	30
	9199	+60	−23	62	48	3
	9199	+69	−23	70	24	1
	9197	+73	+18	74	388	11
	9198	+73	−12	73	24	2
	9190	+81	− 7	81	97	1
	9194	+83	−14	83	24	1
	(13)	(131)	(−2)		2,767	130
17.740 NO-G	9213	−80	+23	81	291	1
	9213	−78	+19	79	12	1
	9210	−13	− 9	15	97	10
	9208	− 3	−20	18	24	5
	9208	+ 5	−19	18	48	4
	9209	+15	−13	19	73	7
	9205	+26	−10	26	485	21
	9205	+30	− 9	31	97	1
	9205	+33	− 7	33	97	1
	9204	+46	+ 6	47	194	1
	9202	+59	−20	60	145	1
	9200	+65	−28	67	121	2
	9199	+68	−23	69	776	1
	(9)	(116)	(−2)		2,460	56
18.631 NO-G	9213	−68	+23	70	291	1
	9213	−65	+19	68	24	1
	9210	+ 1	− 8	7	97	12
	(*)	+ 8	−22	22	24	3
	9208	+19	−19	20	48	1
	9205	+38	−10	39	485	21
	9205	+42	− 9	42	48	1
	9205	+45	− 7	45	73	1
	9204	+59	+ 7	60	194	1
	9202	+71	−20	71	121	1
	9200	+77	−28	77	194	1
	9199	+81	−23	81	776	1
	(9)	(105)	(−2)		2,375	45
19.636 NO-F	9218	−75	− 7	75	48	1
	9213	−55	+23	59	291	1
	9213	−52	+19	56	24	1
	(*)	+ 1	−17	16	24	1
	9210	+14	− 8	15	61	3
	9208	+32	−19	36	48	1
	9205	+48	−10	48	436	17
	9205	+52	−10	52	194	1
	9205	+58	− 7	58	97	1
	9204	+72	+ 8	72	194	1
	(7)	(91)	(−2)		1,417	28

Date U.T. May	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
20.651 NO-G	9218	−61	− 7	61	48	1
	9213	−42	+23	47	339	1
	9217	−33	+12	36	36	2
	9216	+18	−13	21	24	2
	9210	+27	− 8	28	24	2
	9208	+33	−22	37	12	1
	9208	+45	−19	47	48	2
	9209	+52	−13	53	85	6
	9205	+57	−13	57	291	7
	9205	+60	−10	60	291	5
	9205	+69	−11	69	194	2
	9205	+71	− 7	71	48	1
	(8)	(78)	(−2)		1,440	32
21.643 NO-G	9220	−85	−16	85	48	1
	9220	−82	−15	82	97	1
	9219	−70	−22	70	12	1
	9218	−48	− 8	48	48	4
	9213	−29	+23	38	339	1
	9213	−28	+23	37	36	4
	9216	+30	−14	32	145	12
	9210	+40	− 9	40	48	5
	9208	+59	−18	60	12	1
	9214	+63	− 2	63	36	3
	9209	+65	−13	65	48	2
	9205	+73	−11	73	436	4
	9205	+81	− 9	81	242	2
	(10)	(65)	(−2)		1,547	41
22.640 NO-G	9221	−75	− 4	75	194	1
	9222	−74	+24	76	12	1
	9220	−70	−16	70	97	4
	9220	−69	−13	69	48	2
	(*)	−59	+35	66	12	2
	9219	−58	−22	60	6	1
	9218	−37	− 8	37	12	3
	9218	−34	− 7	34	12	1
	9213	−17	+23	31	339	1
	9213	−15	+23	28	61	10
	9217	− 3	+13	15	12	2
	9216	+42	−16	44	61	8
	9216	+44	−13	46	109	12
	9210	+50	− 8	50	24	2
	9214	+75	− 3	75	24	2
	9205	+85	−13	85	194	2
	(12)	(52)	(−2)		1,217	54
23.633 NO-G	9224	−66	− 7	66	24	2
	9221	−61	− 4	61	194	1
	9222	−60	+25	64	12	3
	9220	−60	−15	61	12	3
	9220	−56	−15	57	61	2
	9218	−23	− 8	24	12	6
	9218	−20	− 7	21	12	1
	9223	− 8	+30	33	12	4
	9213	− 3	+23	24	339	1
	9213	− 2	+23	25	24	8
	9217	+10	+13	18	12	9
	9216	+55	−16	56	36	2
	9216	+58	−13	59	267	7
	9210	+64	− 9	64	12	1
	(10)	(38)	(−2)		1,029	50

Date U.T. May	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
24.639 NO-F	9226	−73	−17	73	194	1
	9225	−63	+16	65	12	2
	9224	−54	− 7	54	48	4
	9221	−48	− 3	48	194	1
	9220	−44	−16	46	194	12
	9218	− 7	− 7	10	24	1
	9213	+10	+23	26	339	1
	9217	+23	+14	28	24	3
	9216	+68	−16	69	48	1
	9216	+75	−16	75	242	1
	(9)	(25)	(−2)		1,319	27
25.650 NO-G	9228	−77	+25	78	388	1
	9226	−60	−18	61	145	1
	9225	−53	+13	55	61	2
	9224	−40	− 7	40	24	3
	9221	−35	− 3	35	194	1
	9220	−35	−16	36	12	1
	9220	−30	−17	34	315	15
	9227	− 8	+28	31	36	4
	9218	+ 7	− 7	10	12	3
	9213	+21	+23	31	291	1
	9217	+34	+12	35	6	1
	9217	+37	+13	40	12	3
	(10)	(12)	(−1)		1,496	36
26.567 MW-G	9229	−78	+10	79	388	2
	9228	−63	+25	67	485	1
	9226	−47	−19	49	145	1
	9225	−40	+14	43	48	15
	9221	−22	− 3	22	170	4
	9220	−18	−17	24	170	25
	9227	+ 5	+28	30	12	3
	9213	+34	+23	41	291	1
	9217	+44	+12	45	24	8
	9217	+52	+13	54	6	1
	(9)	(0)	(−1)		1,739	61
27.675 NO-G	9229	−75	+13	76	776	7
	9229	−67	+12	68	242	1
	9229	−62	+10	63	339	1
	9228	−60	+27	62	24	2
	9228	−49	+25	54	436	1
	9226	−33	−18	36	97	1
	9226	−29	−15	32	24	2
	9225	−25	+14	29	24	8
	9221	−12	− 7	13	24	4
	9221	− 8	− 3	8	145	4
	9221	− 1	− 9	8	12	1
	9220	− 4	−17	16	145	12
	9213	+48	+23	53	291	1
	9217	+59	+11	60	97	3
	(8)	(345)	(−1)		2,676	48
28.651 NO-F	9229	−64	+13	65	776	15
	9229	−57	+12	58	194	3
	9229	−53	+12	54	218	2
	9229	−49	+10	50	291	1
	9228	−49	+27	55	24	1
	9228	−43	+26	51	24	1
	9228	−36	+25	44	436	1
	9226	−19	−18	24	97	1
	9226	−15	−15	20	24	2
	9221	+ 6	− 3	6	73	3
	9220	+10	−17	18	242	10
	9213	+61	+23	65	339	1
	9217	+72	+11	72	291	4
	(7)	(332)	(−1)		3,029	45
29.729 NO-G	9231	−61	−16	62	48	2
	9229	−50	+13	51	921	12
	9229	−43	+12	45	242	9
	9229	−39	+11	40	194	2
	9229	−35	+10	37	242	1
	9228	−22	+25	33	436	1
	9226	− 5	−18	18	48	3
	9225	+ 4	+15	16	24	4
	9221	+20	− 3	20	48	1
	9220	+23	−17	28	97	5
	9230	+60	− 8	60	73	2
	9213	+73	+23	77	291	1
	9217	+85	+11	85	48	1
	(10)	(318)	(−1)		2,712	44
31.654 NO-F	9234	−80	+12	80	48	3
	9233	−71	− 9	71	24	3
	9233	−69	−11	69	242	1
	9232	−65	+15	66	12	4
	9232	−56	+16	58	24	3
	9231	−36	−17	39	12	1
	9229	−25	+13	28	970	20
	9229	−16	+12	20	242	10
	9229	−11	+12	17	242	1
	9229	−10	+ 9	14	267	5
	9228	0	+27	28	73	10
	9228	+ 2	+25	26	388	1
	9226	+18	−18	24	24	8
	9225	+25	+16	30	12	1
	9221	+47	− 4	47	36	1
	9230	+84	− 8	84	48	1
	(10)	(292)	(−1)		2,664	73
	Mean daily area for 30 days = 3,249					
	Mean 10 g+s for 30 days = 190.7					
June 1.647 NO-G	9234	−68	+13	69	73	2
	9233	−55	−10	55	194	1
	9232	−52	+16	54	24	2
	9232	−41	+12	43	12	1
	9232	−41	+18	45	24	1
	9229	−12	+13	17	824	3
	9229	− 5	+12	13	242	26
	9229	+ 2	+12	12	218	1
	9229	+ 3	+ 9	10	206	1
	9228	+13	+26	28	48	2
	9228	+16	+25	31	388	1
	9226	+33	−18	38	12	1
	9221	+60	− 4	60	24	1
	(7)	(279)	(−1)		2,289	43
2.685 NO-G	9235	−85	−26	85	97	3
	9234	−54	+13	56	73	4

Date U.T. June	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9233	−41	−10	42	194	1
	9232	−36	+16	40	6	1
	9232	−28	+13	32	24	4
	9232	−27	+17	32	6	1
	9229	+ 2	+13	13	727	2
	9229	+ 9	+12	15	194	15
	9229	+17	+11	21	218	1
	9229	+18	+ 9	21	206	1
	9228	+27	+26	32	12	1
	9228	+30	+25	38	339	1
	9226	+46	−16	49	12	1
	9221	+73	− 4	73	24	1
	(8)	(265)	(0)		2,132	37
3.567	9239	−75	+12	75	12	1
MW-VG	9235	−73	−26	75	339	10
	9236	−73	−29	76	48	2
	9234	−42	+13	44	24	5
	9238	−37	+ 8	39	12	5
	9233	−29	−10	31	194	1
	9232	−19	+11	22	36	5
	9237	− 3	+13	14	16	8
	9229	+14	+13	20	630	1
	9229	+22	+12	25	97	24
	9229	+30	+12	32	194	1
	9229	+31	+ 9	33	194	1
	9228	+39	+26	46	6	1
	9228	+41	+25	47	339	1
	9226	+60	−16	63	24	10
	(11)	(254)	(0)		2,165	76
4.644	9242	−78	+ 8	78	24	1
NO-G	9239	−62	+13	64	24	1
	9236	−60	−31	65	73	1
	9235	−59	−27	63	485	8
	9234	−27	+11	30	24	1
	9238	−22	+ 8	24	73	10
	9233	−16	−10	19	194	2
	9232	−11	+11	15	36	7
	9241	− 5	− 4	6	6	1
	(*)	+ 6	− 5	7	6	1
	9237	+ 9	+ 8	13	6	1
	9237	+11	+13	17	6	1
	9240	+12	−19	23	12	3
	9229	+28	+13	32	582	4
	9229	+39	+13	42	73	8
	9229	+42	+12	44	194	1
	9229	+43	+ 9	44	194	1
	9228	+56	+24	60	339	1
	9226	+73	−12	73	73	2
	(15)	(240)	(0)		2,424	55
5.751	(*)	−72	−12	72	12	1
NO-G	9247	−72	+17	73	12	1
	9242	−65	+ 8	66	97	10
	9239	−48	+13	50	24	1
	9236	−47	−29	53	73	5
	9235	−46	−27	52	436	13
	9245	−24	−17	29	48	11
	9244	−18	−25	32	24	5
	9234	−13	+12	18	24	3

Date U.T. June	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9238	− 8	+ 8	12	48	7
	9233	− 3	−10	11	170	1
	9233	− 2	− 9	10	24	5
	9232	+ 3	+12	13	48	6
	(*)	+17	− 7	19	24	7
	9243	+23	−11	25	12	1
	9229	+42	+12	44	533	3
	9229	+50	+10	51	73	6
	9229	+57	+11	58	194	1
	9229	+58	+ 9	59	194	1
	9228	+70	+24	72	339	1
	(16)	(225)	(0)		2,409	89
6.635	9246	−73	−12	73	242	4
NO-G	(*)	−60	−13	61	6	1
	9247	−59	+17	61	24	1
	9242	−51	+ 8	52	61	3
	9239	−36	+12	38	24	1
	9236	−36	−30	45	48	6
	9235	−34	−27	43	388	11
	9245	−11	−18	22	97	8
	9244	− 4	−24	24	6	2
	9234	0	+12	12	24	4
	9238	+ 6	+ 8	11	36	2
	9248	+ 6	−18	20	12	1
	9233	+11	− 9	15	194	10
	9232	+16	+12	20	24	4
	9232	+25	+12	28	12	1
	9229	+55	+12	57	533	1
	9229	+56	+ 9	57	61	6
	9229	+68	+ 9	68	48	1
	9229	+70	+10	70	194	1
	9229	+71	+ 8	71	145	1
	9228	+83	+24	83	339	1
	(16)	(213)	(0)		2,518	70
7.660	9251	−80	−17	80	388	1
NO-F	9246	−60	−13	61	218	7
	9246	−55	−12	56	73	1
	(*)	−57	− 7	57	12	1
	9247	−45	+17	48	48	1
	9250	−43	−12	45	6	1
	9242	−37	+ 8	38	36	3
	9239	−23	+12	26	16	1
	9236	−23	−29	36	24	2
	9235	−22	−27	34	388	9
	(*)	−10	−11	14	12	2
	(*)	− 5	− 4	6	12	3
	9245	+ 2	−18	18	36	4
	9249	+11	−14	18	24	2
	9238	+22	+ 8	24	12	1
	9233	+24	− 9	25	170	1
	9229	+68	+11	69	533	2
	9229	+72	+ 9	72	388	4
	9229	+85	+10	85	97	1
	(16)	(200)	(0)		2,493	47
8.639	9251	−67	−19	69	339	1
NO-G	9252	−65	− 1	65	6	1
	9246	−47	−14	49	242	10

Date U.T. June	Mount Wilson group No.	Heliographic Difference in longitude	Heliographic Latitude	Distance from center of disk	Area of spot or group	Spot count
		o	o	o		
	9246	−45	−10	46	12	4
	9246	−42	−13	44	145	2
	9247	−34	+17	38	6	1
	9250	−31	−12	33	6	1
	9242	−24	+ 8	26	12	4
	9239	−10	+12	15	12	1
	9236	−10	−30	32	73	11
	9235	− 8	−27	29	291	6
	9249	+22	−13	25	24	2
	9238	+36	+ 7	37	12	1
	9233	+37	−11	38	194	2
	9232	+43	+11	44	12	1
	(*)	+59	+ 5	60	12	1
	9229	+82	+11	82	485	1
	9229	+84	+ 9	84	339	1
	(15)	(187)	(0)		2,222	51
9.642	9253	−73	−13	74	145	2
NO-VG	9251	−60	−19	62	36	1
	9251	−57	−19	59	12	7
	9251	−54	−19	57	339	1
	9252	−57	− 5	57	6	1
	9252	−55	− 2	55	48	9
	9252	−51	− 1	51	48	1
	9246	−37	−15	40	242	20
	9246	−34	−14	36	73	7
	9246	−30	−13	33	97	14
	9246	−28	−14	32	194	1
	9250	−17	−13	22	12	2
	9236	+ 3	−33	33	97	15
	9239	+ 4	+11	12	12	3
	9235	+ 5	−27	27	291	20
	9233	+51	−11	52	194	1
	9232	+57	+12	58	97	7
	(10)	(173)	(0)		1,943	112
10.647	9253	−60	−13	61	73	4
NO-VG	9251	−46	−19	50	97	10
	9251	−40	−19	44	339	1
	9252	−39	− 1	39	109	13
	9246	−23	−16	28	291	16
	9246	−18	−11	22	48	14
	9246	−14	−13	19	61	9
	9246	−13	−13	18	145	1
	9250	− 2	−12	12	12	1
	9236	+17	−31	35	48	7
	9235	+19	−28	34	242	5
	9245	+44	−19	47	12	1
	9233	+64	−12	65	194	1
	9232	+71	+13	71	121	9
	(10)	(160)	(0)		1,792	92
11.642	9253	−47	−15	49	48	8
NO-VG	9254	−38	+14	41	73	10
	9251	−35	−20	40	12	1
	9251	−30	−19	36	48	10
	9251	−28	−19	34	388	1
	9252	−27	− 1	27	109	16
	9246	−10	−16	18	170	15
	9246	− 7	−11	14	24	7
	9246	− 5	− 9	12	12	2

Date U.T. June	Mount Wilson group No.	Heliographic Difference in longitude	Heliographic Latitude	Distance from center of disk	Area of spot or group	Spot count
		o	o	o		
	9246	− 1	−15	16	12	9
	9246	+ 1	−15	16	121	1
	9250	+11	−12	17	24	7
	9236	+31	−32	44	24	7
	9235	+31	−29	43	121	9
	9233	+78	−12	78	194	1
	(9)	(147)	(+1)		1,380	104
12.638	9253	−34	−14	36	24	2
NO-VG	9254	−23	+14	25	73	7
	9254	−20	+11	22	48	4
	9251	−16	−19	26	48	6
	9251	−14	−19	25	339	1
	9252	−15	− 2	15	145	1
	9252	−10	− 1	10	97	14
	9246	+ 5	−14	16	97	16
	9246	+ 9	− 8	14	48	4
	9246	+15	−15	22	97	1
	9250	+25	−13	28	24	11
	9236	+43	−31	51	6	2
	9235	+43	−28	50	145	8
	9245	+68	−15	69	73	2
	(9)	(134)	(+1)		1,264	79
13.570	9257	−63	+16	63	12	2
MW-VG	9256	−48	+13	50	16	7
	9253	−22	−15	27	24	10
	9254	−13	+16	18	36	6
	9254	−10	+14	16	36	10
	9254	− 8	+11	13	61	14
	9251	−11	−19	22	24	16
	9251	− 5	−19	21	12	10
	9251	− 2	−19	20	12	11
	9251	− 1	−18	19	339	1
	9252	− 2	− 2	3	73	15
	9252	+ 3	− 2	4	48	19
	9252	+ 4	+ 1	4	48	10
	9246	+18	−14	23	73	21
	9246	+26	−15	30	24	3
	9246	+27	−13	31	109	1
	9235	+56	−28	60	97	6
	9245	+80	−15	80	97	9
	(9)	(121)	(+1)		1,141	171
14.644	9259	−88	+21	88	48	1
NO-G	9259	−86	+23	86	97	1
	9257	−49	+15	50	24	3
	9256	−33	+13	34	194	11
	9253	− 8	−16	19	36	6
	9258	− 3	− 6	7	24	5
	9255	− 3	+13	13	24	2
	9254	+ 2	+13	12	6	2
	9254	+ 7	+12	13	36	9
	9251	+10	−20	23	48	5
	9251	+12	−19	23	339	1
	9252	+13	− 3	13	16	3
	9252	+18	− 3	18	48	14
	9246	+31	−15	35	48	2
	9246	+42	−15	44	97	4
	9235	+70	−28	72	48	1
	(11)	(107)	(+1)		1,133	70

Date U.T. June	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
15.638 NO-G	9259	−75	+21	75	48	1
	9259	−72	+23	72	109	1
	9259	−70	+19	70	48	1
	9257	−34	+16	37	48	4
	9256	−20	+13	23	267	10
	9256	−19	+12	21	194	18
	9260	+ 2	+11	11	48	6
	9253	+ 5	−17	19	24	3
	9255	+10	+13	15	24	2
	9254	+20	+12	22	24	2
	9251	+26	−19	32	291	2
	9252	+27	− 3	27	388	9
	9252	+32	− 3	32	242	12
	9246	+43	−16	45	48	4
	9246	+55	−15	57	97	4
	(10)	(94)	(+1)		1,900	79
16.878 NO-F	9259	−57	+22	59	97	7
	9263	−27	+ 9	28	121	9
	9262	−24	+26	34	12	2
	9257	−17	+14	21	97	11
	9257	−14	+17	20	194	1
	9256	− 4	+12	12	436	16
	9260	+19	+12	21	194	13
	9254	+33	+12	35	6	26
	9251	+42	−20	46	267	1
	9251	+48	−20	52	12	1
	9252	+42	− 6	42	291	1
	9252	+45	− 5	45	97	10
	9261	+47	+30	52	6	1
	9246	+60	−17	62	12	1
	9246	+73	−16	73	73	1
	(11)	(78)	(+1)		1,915	77
17.638 NO-F	9265	−75	+29	76	61	6
	9259	−45	+22	48	97	1
	9259	−44	+21	46	24	7
	9263	−19	+11	21	12	1
	9263	−15	+ 9	17	242	10
	9257	− 7	+14	15	145	6
	9257	− 2	+17	16	194	1
	9256	+ 7	+12	13	436	21
	9260	+29	+12	31	145	18
	9260	+30	+11	31	48	1
	9260	+31	+12	33	218	1
	9254	+42	+12	43	73	2
	9252	+53	− 6	53	218	1
	9251	+54	−20	57	291	1
	9251	+59	−20	61	36	3
	9264	+56	+11	57	48	2
	9246	+84	−16	84	48	1
	(11)	(68)	(+1)		2,336	83
18.697 NO-F	9265	−61	+29	64	97	4
	(*)	−37	+12	38	36	2
	9259	−31	+22	36	97	1
	9259	−30	+21	35	24	4
	9263	− 2	+ 9	8	194	10
	9257	+ 6	+14	15	388	11
	9257	+12	+17	20	194	1
	9256	+20	+12	22	582	14
	9260	+43	+11	44	388	9
	9254	+56	+13	57	24	3
	9251	+68	−20	70	339	1
	9252	+68	− 6	68	218	1
	9264	+68	+11	68	436	6
	(11)	(54)	(+1)		3,017	67
19.646 NO-G	9266	−85	−13	85	727	2
	9266	−78	−16	78	776	3
	9265	−51	+30	56	48	1
	9265	−46	+29	53	73	4
	9259	−19	+22	27	145	1
	9259	−18	+20	25	24	6
	9263	+10	+10	14	97	8
	9263	+15	+ 8	16	242	3
	9257	+15	+15	20	291	14
	9257	+17	+17	23	97	5
	9257	+20	+15	24	388	4
	9257	+25	+16	29	145	2
	9256	+30	+13	33	242	13
	9256	+35	+15	37	194	4
	9256	+35	+ 9	36	16	3
	9260	+55	+11	56	194	9
	9260	+56	+13	57	242	4
	9254	+71	+13	71	12	1
	9264	+80	+11	80	291	4
	9251	+82	−20	82	291	1
	9252	+83	− 5	83	145	1
	(11)	(41)	(+2)		4,680	93
20.851 NO-G	9266	−78	−19	79	388	1
	9266	−68	−13	69	1,164	6
	9266	−63	−13	65	24	1
	9266	−63	−16	65	388	2
	9266	−59	−16	61	194	3
	9267	−56	+23	59	12	2
	9265	−37	+30	45	24	6
	9265	−36	+29	44	24	1
	9259	− 3	+22	20	97	1
	9257	+30	+15	32	206	8
	9257	+35	+16	37	61	2
	9257	+38	+15	41	388	2
	9257	+41	+17	43	145	2
	9263	+31	+ 8	32	73	1
	9256	+46	+14	47	242	11
	9256	+51	+15	52	194	4
	9260	+70	+10	70	48	4
	9260	+72	+13	72	194	1
	(8)	(25)	(+2)		3,866	58
21.642 NO-G	9270	−87	+24	87	145	1
	9266	−66	−19	68	388	7
	9266	−56	−13	57	1,067	17
	9266	−52	−17	55	291	6
	9266	−49	−19	52	48	3
	9266	−46	−16	48	170	4
	9269	−55	+23	57	24	1
	9267	−45	+22	48	97	2
	9259	+ 7	+24	23	12	5
	9259	+ 8	+22	22	61	1
	9268	+17	− 8	21	24	3

Date U.T. June	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9263	+43	+ 8	44	97	1
	9257	+42	+15	44	291	6
	9257	+46	+16	48	24	1
	9257	+49	+14	51	194	2
	9257	+51	+15	53	121	2
	9256	+57	+12	58	242	6
	9256	+61	+13	62	291	3
	(9)	(15)	(+2)		3,587	71
22.638	9272	−79	+10	79	12	1
NO-G	9270	−74	+25	75	194	1
	9266	−53	−19	56	388	8
	9266	−47	−13	50	73	4
	9266	−43	−16	46	727	17
	9266	−40	−11	42	194	4
	9266	−40	−17	44	242	5
	9266	−35	−17	40	194	7
	(*)	−48	+27	53	12	4
	9269	−41	+24	45	48	1
	9267	−35	+23	40	36	5
	9267	−29	+22	34	48	1
	9259	+21	+21	27	61	3
	9268	+31	− 9	33	24	2
	9257	+54	+15	56	194	5
	9257	+61	+15	62	291	1
	9257	+65	+16	66	97	1
	9263	+56	+ 8	56	97	1
	9256	+70	+12	70	145	6
	9256	+75	+15	75	194	1
	(11)	(1)	(+2)		3,271	79
23.655	9275	−80	+13	80	727	2
NO-G	9275	−78	+11	78	388	3
	9274	−68	− 9	69	12	1
	9272	−66	+ 9	69	24	3
	9270	−60	+25	63	194	1
	(*)	−58	+ 8	59	12	2
	9266	−40	−18	44	339	10
	9266	−33	−13	35	73	3
	9266	−29	−16	34	1,164	10
	9271	−28	+10	30	24	5
	9269	−28	+22	33	48	1
	9273	−21	−16	27	121	10
	9267	−21	+23	29	48	3
	9267	−16	+22	25	48	3
	9259	+32	+23	38	6	1
	9259	+33	+21	37	61	1
	9268	+44	− 9	45	121	8
	9257	+67	+13	68	145	8
	9257	+75	+15	75	291	1
	9257	+80	+16	80	97	1
	9263	+69	+ 8	69	97	1
	(14)	(348)	(+2)		4,040	78
24.640	9275	−68	+13	68	824	3
NO-G	9275	−65	+11	65	291	1
	9275	−62	+12	62	194	5
	9274	−57	− 9	58	6	1
	9272	−52	+ 9	53	24	1
	9270	−48	+25	52	145	1
	9277	−29	− 3	30	97	9
	9266	−26	−18	33	218	11
	9266	−15	−16	23	1,067	35
	9276	−20	− 9	23	12	3
	9269	−15	+23	25	36	2
	9271	−15	+11	18	12	2
	9267	− 7	+23	22	24	6
	9267	− 4	+22	20	36	2
	9273	− 6	−16	18	109	10
	9259	+46	+21	48	61	1
	9268	+57	− 9	58	48	6
	9268	+61	− 8	62	97	1
	9257	+80	+14	80	242	1
	9263	+82	+ 9	82	97	1
	(15)	(335)	(+2)		3,640	102
25.667	9278	−81	+11	81	145	1
NO-VG	9278	−75	+ 9	75	218	1
	9275	−54	+12	55	824	1
	9275	−50	+11	51	291	8
	9275	−47	+12	48	194	9
	9272	−39	+ 9	40	12	3
	9274	−42	− 9	44	6	1
	9270	−35	+26	42	121	1
	9277	−14	− 4	15	194	15
	9266	−12	−18	24	170	20
	9266	− 1	−16	19	776	38
	9276	− 8	−10	14	16	9
	9269	− 3	+22	20	24	1
	9267	+ 5	+23	21	12	1
	9267	+12	+23	24	24	1
	9273	+ 9	−16	20	97	10
	9259	+58	+21	60	48	1
	9268	+69	− 9	70	73	7
	9268	+76	− 9	76	145	1
	(13)	(321)	(+2)		3,390	129
26.701	9278	−68	+11	68	145	1
NO-F	9278	−61	+ 9	61	194	1
	9275	−40	+12	41	824	4
	9275	−37	+10	38	291	1
	9275	−36	+12	37	97	7
	9274	−28	−10	31	6	1
	9272	−24	+ 9	25	12	3
	9270	−22	+25	32	73	1
	9277	− 1	− 3	5	170	8
	9266	+ 1	−19	21	194	8
	9266	+14	−16	22	679	16
	9269	+10	+22	23	24	1
	9271	+14	+10	15	48	3
	9273	+23	−15	28	73	2
	9267	+25	+23	32	36	1
	9259	+71	+21	72	48	1
	(12)	(308)	(+2)		2,914	59
27.640	9278	−57	+11	58	61	4
NO-G	9278	−48	+ 9	48	194	2
	9279	−40	+ 6	40	12	2
	9275	−27	+12	28	1,115	4
	9275	−27	+ 9	28	24	5
	9275	−22	+11	24	48	7
	9274	−15	− 9	19	16	3

Date U.T. June	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9272	−12	+11	15	6	1
	9270	− 9	+25	25	61	1
	9277	+10	− 3	12	97	8
	9277	+15	− 3	16	48	10
	9266	+15	−19	26	145	8
	9266	+23	−16	29	291	8
	9266	+29	−16	33	388	10
	9269	+23	+22	30	24	1
	9271	+27	+11	28	121	10
	9273	+37	−15	41	24	1
	9267	+38	+22	42	12	1
	(12)	(295)	(+2)		2,687	86
28.648	9283	−75	−16	75	145	3
N O-G	9282	−55	−21	60	6	1
	9278	−42	+11	42	36	6
	9278	−37	+ 9	37	24	8
	9278	−33	+ 9	33	194	1
	9279	−26	+ 5	26	12	1
	9275	−13	+12	15	1,115	8
	9275	−13	+ 8	14	24	4
	9275	− 5	+12	10	48	6
	9272	− 2	+ 8	5	24	3
	9270	+ 3	+25	22	48	2
	9280	+17	+17	22	97	10
	9277	+23	− 3	24	145	6
	9266	+29	−18	35	97	7
	9266	+37	−16	42	242	12
	9266	+41	−16	45	339	8
	9269	+37	+23	41	24	1
	9271	+41	+11	41	97	8
	(12)	(282)	(+3)		2,717	95
29.653	9283	−73	−13	74	24	1
N O-G	9283	−68	−16	70	291	11
	9283	−58	−15	61	97	1
	(*)	−67	+16	67	12	1
	9282	−42	−19	47	6	1
	9286	−30	+10	31	12	3
	9278	−23	+ 9	24	12	5
	9278	−20	+ 9	21	194	1
	9279	−11	+ 5	11	12	3
	9275	+ 1	+12	9	1,115	13
	9275	+ 1	+ 8	5	24	2
	9275	+ 5	+11	9	6	1
	9272	+12	+ 8	13	24	3
	9270	+16	+25	28	36	1
	9281	+20	+12	22	12	2
	9280	+30	+17	33	170	10
	9277	+37	− 3	37	48	6
	9266	+41	−18	45	48	5
	9266	+49	−18	52	145	3
	9266	+53	−18	57	145	6
	9271	+50	+13	51	97	2
	9271	+52	+11	52	48	5
	9285	+80	+10	80	48	1
	9284	+82	−13	82	48	2
	(16)	(268)	(+3)		2,674	89
30.642	9283	−60	−13	62	24	1
N O-G	9283	−55	−16	60	291	8

Date U.T. June	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9283	−45	−15	49	97	1
	9287	−37	− 7	39	48	6
	9278	− 6	+ 8	8	194	1
	9275	+ 9	+16	16	48	1
	9275	+13	+ 8	14	48	1
	9275	+14	+12	16	1,115	10
	9272	+28	+ 8	29	24	2
	9270	+30	+25	36	24	2
	9280	+40	+19	42	73	2
	9280	+46	+17	48	61	2
	9271	+61	+15	62	24	1
	9271	+66	+13	66	145	2
	9266	+63	−17	65	48	1
	9266	+67	−17	70	194	1
	(9)	(255)	(+3)		2,458	42
	Mean daily area for 30 days = 2,547					
	Mean 10 g+s for 30 days = 195.1					
July	9283	−43	−17	46	24	1
1.780	9283	−40	−15	44	242	9
N O-G	9283	−31	−15	36	97	1
	9287	−18	− 7	22	12	1
	9278	+ 7	+ 7	9	36	2
	9278	+10	+ 8	12	194	1
	9279	+13	+ 3	13	24	3
	9275	+27	+16	31	12	2
	9275	+29	+12	31	1,067	13
	9275	+35	+14	36	48	3
	9280	+55	+19	56	97	1
	9280	+59	+17	60	36	4
	9271	+80	+13	80	73	2
	(7)	(240)	(+3)		1,962	43
2.645	9290	−85	+13	85	48	1
N O-G	9283	−29	−16	34	121	11
	9283	−18	−15	26	73	2
	9287	− 5	− 6	11	24	4
	9278	+19	+ 7	20	12	4
	9278	+22	+ 8	23	194	1
	9289	+23	+28	33	12	3
	9275	+41	+12	41	1,067	19
	9288	+41	+ 7	41	121	7
	9272	+51	+10	51	6	1
	9272	+52	+13	52	12	1
	9280	+68	+19	69	73	1
	9280	+71	+15	71	12	1
	9277	+80	− 4	80	24	1
	(10)	(229)	(+3)		1,799	57
3.649	9293	−83	−14	83	388	1
N O-G	9292	−82	+11	82	73	1
	9290	−70	+15	70	73	2
	9283	−16	−16	25	218	15
	9283	− 5	−15	18	73	2
	9287	+ 8	− 7	13	24	6
	9291	+ 9	+13	13	48	5
	9291	+11	+11	13	48	3
	9278	+33	+ 9	33	97	5
	9278	+35	+ 7	35	170	1

Date U.T. July	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Heliographic Distance from center of disk °	Area of spot or group	Spot count
	9275	+54	+12	54	1,115	15
	9288	+55	+ 7	55	121	8
	(9)	(216)	(+3)		2,448	64
4.558	9294	−87	+12	87	194	2
MW-G	9295	−86	−17	86	145	1
	9292	−70	+10	70	73	1
	9293	−69	−14	70	291	1
	9290	−58	+15	59	61	15
	9283	− 3	−16	19	97	17
	9283	+ 9	−15	20	61	1
	9287	+20	− 7	22	36	8
	9291	+23	+13	25	12	2
	9291	+25	+11	26	24	4
	9278	+47	+11	47	48	7
	9278	+48	+ 7	48	206	1
	9275	+68	+12	68	1,115	4
	9288	+69	+ 7	69	121	5
	(11)	(204)	(+3)		2,484	69
5.563	9294	−73	+12	73	291	5
MW-G	9295	−72	−17	75	121	1
	9293	−64	−15	66	48	4
	9293	−57	−14	60	291	2
	9296	−59	− 6	61	12	1
	9292	−57	+11	57	48	1
	9283	+ 9	−16	21	48	9
	9283	+22	−15	29	48	1
	9283	+19	−15	26	24	6
	9287	+34	− 7	36	24	5
	9278	+59	+11	59	12	4
	9278	+61	+ 8	61	145	1
	9275	+81	+12	81	1,067	2
	9288	+82	+ 7	82	73	4
	(10)	(190)	(+3)		2,252	46
6.567	9299	−66	+14	66	97	4
MW-G	9298	−61	− 4	63	16	2
	9294	−60	+12	60	242	3
	9295	−58	−17	61	121	1
	9293	−52	−15	55	24	1
	9293	−43	−14	47	242	1
	9296	−47	− 6	49	12	2
	9297	−44	−17	49	24	1
	9292	−44	+12	44	48	1
	9290	−28	+17	31	24	3
	9283	+23	−16	30	24	3
	9283	+35	−15	39	36	1
	9278	+75	+ 8	75	145	1
	(11)	(177)	(+3)		1,055	24
7.558	9301	−80	+15	80	97	2
MW-F	9300	−59	+16	59	24	3
	9299	−52	+13	52	36	4
	9298	−47	− 4	48	24	8
	9298	−47	− 8	49	12	2
	9294	−47	+12	47	194	5
	9295	−44	−17	49	61	1
	9293	−32	−12	36	6	1
	9293	−29	−14	33	194	1

Date U.T. July	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Heliographic Distance from center of disk °	Area of spot or group	Spot count
	9292	−30	+12	32	48	1
	9290	−17	+16	22	6	7
	9290	−14	+16	18	12	1
	9283	+35	−15	39	12	2
	9283	+38	−14	42	6	1
	9283	+49	−15	52	12	1
	9287	+49	− 9	51	16	4
	(11)	(164)	(+4)		760	44
8.560	9303	−78	+15	78	24	1
MW-VG	9301	−68	+15	68	61	1
	9301	−65	+13	65	73	7
	9300	−48	+17	50	12	2
	9300	−45	+16	46	12	2
	9302	−46	+20	48	6	1
	9299	−39	+13	40	109	11
	9298	−33	− 4	34	12	2
	9298	−33	− 7	35	12	1
	9294	−33	+12	34	218	10
	9295	−30	−17	36	61	1
	9293	−19	−11	24	24	10
	9293	−17	−13	25	170	6
	9292	−17	+12	19	24	1
	9283	+62	−15	64	24	1
	(11)	(151)	(+4)		842	57
9.570	9304	−76	+11	76	97	3
MW-VG	9304	−74	+13	74	145	2
	9303	−64	+15	64	24	1
	9301	−55	+15	56	97	8
	9301	−50	+13	51	97	18
	9300	−33	+17	36	24	11
	9300	−31	+17	33	97	4
	9299	−26	+13	28	48	11
	9299	−23	+12	25	48	12
	9294	−19	+11	21	194	7
	9295	−17	−16	26	12	3
	9295	−16	−17	26	61	4
	9293	− 3	−13	17	145	1
	9292	− 3	+12	8	12	2
	9290	+13	+16	18	12	5
	(10)	(137)	(+4)		1,113	92
10.654	9306	−86	− 8	86	194	1
NO-F	9305	−76	− 3	76	48	3
	9304	−62	+11	62	97	4
	9304	−61	+13	61	194	6
	9303	−47	+16	48	24	1
	9301	−40	+16	41	145	7
	9301	−36	+13	37	267	12
	9300	−18	+17	22	145	7
	9300	−14	+16	18	242	10
	9299	−12	+13	15	24	2
	9299	− 9	+12	12	97	4
	9294	− 5	+11	8	194	6
	9295	− 3	−20	24	48	9
	9293	+12	−14	22	194	1
	9296	+13	− 8	17	6	1
	(11)	(123)	(+4)		1,919	80

Date U.T. July	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
11.651	9306	−72	− 8	72	145	1
N O-F	9305	−63	− 3	63	48	2
	9307	−60	+12	60	12	2
	9304	−49	+11	49	24	6
	9304	−46	+13	47	145	1
	9303	−34	+16	35	12	1
	9301	−27	+16	30	61	7
	9301	−22	+13	24	218	23
	9300	− 5	+17	14	194	18
	9300	0	+17	13	291	7
	9299	+ 5	+12	9	73	10
	9294	+ 8	+12	12	170	8
	9295	+ 8	−19	24	48	6
	9292	+24	+10	25	6	1
	9293	+26	−14	28	194	1
	9296	+26	− 7	26	12	4
	(13)	(110)	(+4)		1,653	98
12.647	9306	−58	− 8	59	121	1
N O-F	9305	−48	− 3	49	36	3
	9307	−47	+12	47	24	4
	9304	−36	+11	37	48	1
	9304	−32	+12	33	145	1
	9301	−13	+16	19	48	7
	9301	− 8	+13	12	194	20
	9300	+ 8	+16	16	194	18
	9300	+13	+15	17	291	17
	9299	+19	+10	20	36	3
	9294	+21	+12	23	97	5
	9295	+22	−20	32	24	3
	9292	+32	+15	33	12	3
	9293	+39	−14	42	158	1
	(11)	(97)	(+4)		1,428	87
13.640	9306	−44	− 8	46	97	1
N O-G	9305	−35	− 4	36	24	2
	9307	−34	+12	35	12	5
	9307	−29	+12	31	6	1
	9304	−23	+11	24	121	12
	9304	−18	+12	20	97	1
	9311	−16	+16	21	12	4
	9310	− 5	+11	8	6	1
	9309	+ 4	−18	23	12	2
	9301	+ 5	+12	9	73	12
	9301	0	+13	9	24	8
	9301	+ 8	+11	11	242	16
	9300	+22	+15	24	194	16
	9300	+27	+14	30	242	1
	9299	+33	+ 9	34	24	1
	9294	+34	+11	35	61	3
	9295	+35	−20	42	24	2
	9308	+40	− 6	42	12	1
	9292	+45	+15	46	6	2
	9293	+53	−14	56	145	1
	(15)	(63)	(+4)		1,434	92
14.838	9306	−29	− 9	32	109	1
N O-G	9305	−19	− 4	21	12	3
	9307	−16	+12	18	364	20
	9304	− 7	+10	10	145	8
	9304	− 1	+10	6	121	1

Date U.T. July	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9311	− 2	+18	15	12	3
	9310	+ 9	+12	12	97	3
	9310	+11	+10	12	73	8
	9301	+19	+11	21	61	6
	9301	+24	+11	25	6	1
	9301	+25	+12	26	97	9
	9301	+27	+13	29	97	1
	9300	+36	+13	38	194	8
	9300	+43	+12	44	242	6
	9295	+48	−21	53	12	1
	9294	+49	+11	50	16	2
	9308	+50	− 6	51	6	1
	9293	+68	−13	69	145	1
	(12)	(68)	(+4)		1,809	83
15.662	9312	−82	−24	83	194	1
N O-G	9306	−16	− 9	21	97	1
	9307	−10	+11	12	48	6
	9307	− 5	+11	8	194	6
	9307	0	+12	8	97	11
	9304	+ 4	+12	9	145	13
	9304	+10	+12	12	97	3
	9311	+12	+17	18	12	2
	9310	+19	+11	21	97	1
	9310	+23	+10	24	145	15
	9301	+30	+12	31	61	8
	9301	+36	+11	37	48	7
	9301	+40	+13	41	97	2
	9300	+50	+13	51	145	10
	9300	+57	+12	57	194	3
	9294	+60	+11	60	12	1
	9293	+80	−13	80	121	1
	(10)	(57)	(+4)		1,804	91
16.647	9312	−70	−24	74	145	1
N O-G	9306	− 4	− 9	14	145	4
	9307	+ 3	+12	8	73	6
	9307	+ 8	+12	12	194	5
	9307	+13	+11	14	170	13
	9304	+17	+12	19	97	9
	9304	+21	+10	22	48	5
	9311	+24	+17	27	16	5
	9310	+31	+12	32	48	5
	9310	+34	+ 9	35	12	3
	9310	+38	+11	39	121	1
	9301	+42	+13	43	24	6
	9301	+53	+12	54	97	1
	9300	+62	+14	62	73	5
	9300	+70	+12	70	194	2
	(8)	(44)	(+4)		1,457	71
17.667	9314	−78	− 6	78	145	1
N O-G	9312	−57	−25	62	121	1
	9313	−16	+26	26	6	2
	9306	+ 5	−10	15	6	1
	9306	+10	− 9	17	97	7
	9307	+15	+12	16	48	5
	9307	+21	+11	22	315	7
	9307	+26	+11	27	48	6
	9304	+27	+11	28	24	7
	9304	+36	+10	37	36	5

Date U.T. July	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9310	+45	+12	45	73	8
	9310	+51	+11	51	242	6
	9301	+68	+14	68	194	1
	9300	+82	+12	82	145	1
	(9)	(30)	(+5)		1,500	58
18.676	9316	−84	+ 8	84	194	1
NO-G	9314	−71	− 5	71	121	6
	9314	−63	− 5	64	145	2
	9312	−43	−24	51	97	1
	9315	−30	−12	34	48	4
	9306	+24	− 9	28	36	2
	9307	+28	+12	29	24	1
	9307	+34	+11	34	194	5
	9307	+38	+11	38	24	6
	9304	+41	+10	41	97	9
	9311	+52	+17	53	24	1
	9310	+58	+10	58	97	4
	9310	+65	+10	65	339	1
	9301	+80	+13	80	145	1
	(10)	(17)	(+5)		1,585	44
19.751	9316	−73	+ 8	73	48	1
NO-G	9316	−68	+ 9	68	218	1
	9314	−58	− 4	59	24	2
	9314	−48	− 4	49	145	3
	9312	−30	−23	40	97	1
	9315	−16	−12	23	145	11
	9306	+40	− 9	42	12	1
	9307	+48	+12	48	145	1
	9307	+51	+10	51	97	7
	9307	+58	+ 9	58	48	1
	9310	+73	+10	73	73	1
	9310	+79	+ 9	79	339	1
	(7)	(3)	(+5)		1,391	31
20.776	9317	−81	+12	81	388	1
NO-VG	9317	−80	+ 9	80	194	3
	9316	−60	+ 8	60	61	4
	9316	−55	+ 8	55	218	1
	9314	−40	− 5	42	24	7
	9314	−35	− 5	37	170	8
	9312	−17	−24	33	73	4
	9315	− 4	−12	16	121	6
	9315	+ 1	−12	16	97	7
	9306	+51	− 8	53	12	3
	9307	+60	+ 9	60	61	4
	9307	+63	+11	63	194	6
	9307	+65	+ 8	65	97	3
	9307	+70	+10	70	48	1
	(7)	(349)	(+5)		1,758	58
21.646	9320	−82	+ 7	82	97	3
NO-G	9319	−80	−15	80	48	1
	9318	−79	+ 7	79	242	1
	9317	−68	+11	68	630	1
	9317	−67	+10	67	339	8
	9317	−62	+ 8	62	48	2
	9316	−47	+ 7	47	24	3
	9316	−43	+ 8	43	194	1
	9314	−25	− 5	27	242	15
	9312	− 5	−25	30	48	2
	9315	+ 8	−13	19	145	8
	9315	+12	−13	21	97	5
	9307	+73	+ 9	73	242	1
	9307	+75	+11	75	145	1
	9307	+79	+ 7	79	121	3
	(9)	(337)	(+5)		2,662	55
22.644	9320	−69	+ 7	69	97	6
NO-G	9319	−66	−17	68	48	8
	9318	−65	+ 7	65	206	1
	9317	−56	+11	56	630	1
	9317	−54	+ 9	54	291	10
	9317	−51	+13	51	24	6
	9317	−50	+ 8	50	73	3
	9316	−35	+ 7	35	48	12
	9316	−32	+ 9	32	24	12
	9316	−30	+ 8	30	194	1
	9314	−11	− 5	15	388	25
	9312	+ 7	−25	31	48	8
	9315	+22	−13	28	242	9
	9315	+26	−12	32	97	6
	9307	+85	+ 9	85	291	2
	(9)	(324)	(+5)		2,701	110
23.711	9320	−56	+ 7	56	73	2
NO-F	9319	−51	−15	54	24	3
	9318	−51	+ 7	51	206	1
	9317	−42	+11	42	582	1
	9317	−39	+10	39	291	12
	9317	−36	+ 9	36	24	2
	9322	−31	−17	38	16	2
	9316	−19	+ 8	20	24	15
	9316	−17	+ 8	18	218	1
	9314	+ 3	− 5	10	194	16
	9314	+ 8	− 5	12	97	7
	9321	+ 3	−25	30	48	2
	9312	+21	−25	36	24	1
	9315	+35	−14	40	194	4
	9315	+41	−13	45	97	2
	(10)	(310)	(+5)		2,112	72
24.649	9326	−80	+14	80	291	1
NO-G	9320	−44	+ 7	44	97	1
	9318	−38	+ 7	38	291	5
	9317	−30	+12	31	436	1
	9317	−27	+10	27	388	12
	9322	−21	−19	31	97	5
	(*)	− 9	+ 6	9	12	1
	9324	− 8	+17	15	12	1
	9316	− 3	+ 8	4	194	1
	9323	+13	+ 6	13	24	2
	9314	+13	− 6	17	24	5
	9314	+20	− 5	22	121	6
	9321	+17	−26	35	48	7
	9312	+33	−25	44	24	2
	9315	+47	−14	51	242	6
	9315	+55	−13	58	218	8
	9315	+63	−12	65	24	4
	(13)	(298)	(+5)		2,543	68

Date U.T. July	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
25.642 NO-F	9326	−76	+14	76	194	2
	9326	−66	+14	66	291	1
	9320	−30	+ 7	30	48	1
	9318	−24	+ 7	24	267	1
	9317	−16	+12	17	436	1
	9317	−13	+10	14	339	14
	9322	− 8	−19	24	73	6
	9328	− 5	− 8	14	24	3
	9324	+ 7	+17	15	12	4
	9316	+10	+ 8	11	194	1
	9323	+25	+ 6	25	61	4
	9321	+29	−28	43	36	2
	9314	+37	− 6	38	24	2
	9312	+46	−24	53	6	1
	9315	+61	−14	64	145	7
	9315	+70	−14	72	242	3
	(13)	(285)	(+5)		2,392	53
26.648 NO-F	9329	−78	−17	79	121	3
	9326	−62	+15	62	48	1
	9326	−57	+11	57	48	5
	9326	−53	+14	53	242	1
	9326	−51	+10	51	48	2
	9320	−17	+ 7	18	48	1
	9318	−10	+ 6	10	145	7
	9317	− 2	+12	7	436	1
	9317	+ 1	+10	5	194	6
	9322	+ 1	−20	25	24	4
	9322	+10	−20	26	73	4
	9325	+ 7	+14	12	48	3
	9328	+10	− 8	16	12	1
	9316	+23	+ 7	23	194	1
	9323	+39	+ 4	39	36	2
	9321	+43	−28	53	12	3
	9314	+50	− 6	51	12	3
	9327	+73	+11	73	24	3
	9315	+76	−14	77	97	7
	9315	+84	−14	84	242	2
	(14)	(271)	(+5)		2,104	60
27.640 NO-F	9330	−65	−12	66	24	1
	9329	−64	−17	67	170	3
	9326	−49	+14	49	24	2
	9326	−43	+12	43	97	11
	9326	−39	+13	39	291	1
	9326	−38	+ 9	38	48	1
	9320	− 3	+ 7	4	48	1
	9318	+ 3	+ 6	3	145	10
	9317	+11	+12	12	436	2
	9317	+14	+10	15	194	8
	9322	+20	−20	32	48	7
	9322	+23	−20	34	194	1
	9325	+21	+13	23	48	4
	9324	+33	+17	35	24	4
	9316	+37	+ 7	37	218	1
	(10)	(258)	(+5)		2,009	57
28.683 NO-G	9330	−52	−12	56	48	5
	9329	−51	−17	57	145	1
	9326	−35	+14	36	24	2
	9326	−31	+12	31	242	19
	9326	−27	+13	28	291	1
	9326	−24	+ 9	24	48	1
	9331	−13	+ 9	13	73	6
	9320	+10	+ 6	10	48	1
	9318	+17	+ 6	17	97	10
	9317	+24	+12	25	436	1
	9317	+27	+ 9	27	339	15
	9322	+31	−20	41	73	1
	9322	+39	−20	47	218	1
	9325	+35	+13	36	109	7
	9316	+49	+ 6	49	194	1
	(10)	(244)	(+6)		2,385	72
29.640 NO-VG	9334	−88	− 5	88	48	1
	9333	−67	−12	70	12	4
	9330	−38	−12	42	97	3
	9330	−34	−12	38	48	2
	9329	−38	−17	45	145	3
	9326	−21	+13	22	218	15
	9326	−15	+12	16	48	4
	9326	−13	+13	14	242	1
	9326	−10	+ 9	11	73	1
	9332	− 2	+18	13	36	7
	9331	+ 1	+10	4	36	8
	9320	+24	+ 7	24	48	1
	9318	+30	+ 6	30	61	10
	9317	+37	+12	37	436	1
	9317	+41	+ 9	41	339	13
	9322	+44	−19	52	73	4
	9322	+51	−19	57	218	1
	9325	+49	+14	49	218	4
	9316	+63	+ 6	63	194	1
	(13)	(232)	(+6)		2,590	84
30.640 NO-F	9335	−76	−31	80	61	1
	9334	−74	− 5	76	48	2
	9333	−50	−10	53	97	4
	9333	−50	−13	54	48	1
	9330	−25	−12	30	194	1
	9330	−21	−12	27	24	2
	9329	−25	−17	34	97	1
	9326	− 7	+12	9	194	12
	9326	+ 1	+12	5	242	1
	9326	+ 3	+ 9	5	73	1
	9332	+11	+18	16	242	15
	9331	+12	+10	12	97	7
	9320	+37	+ 7	37	48	1
	9317	+50	+12	50	436	1
	9317	+53	+10	53	388	1
	9317	+57	+ 7	57	97	4
	9317	+60	+ 7	60	48	1
	9322	+58	−20	64	97	4
	9322	+65	−20	70	242	1
	9325	+62	+15	62	145	6
	9316	+76	+ 6	76	194	1
	(13)	(218)	(+6)		3,112	68
31.658 NO-F	9336	−70	−13	72	121	1
	9334	−64	− 5	65	145	2
	9334	−61	− 4	62	48	1
	9335	−62	−31	70	97	2

Date U.T. July	Mount Wilson group No.	Heliographic Difference in longitude °	Heliographic Latitude °	Distance from center of disk °	Area of spot or group	Spot count
	9333	−41	−11	44	48	2
	9333	−39	− 9	42	97	3
	9333	−35	−13	40	24	1
	9333	−34	−13	39	24	1
	9329	−18	−19	31	73	4
	9329	−11	−17	26	97	1
	9330	−13	−13	22	121	1
	9330	− 6	−12	19	24	1
	9326	+ 8	+12	10	145	6
	9326	+13	+12	13	242	1
	9326	+13	+ 9	13	24	1
	9326	+16	+ 9	15	48	1
	9332	+21	+17	24	170	8
	9332	+27	+17	30	97	5
	9331	+26	+ 9	28	36	5
	9320	+50	+ 6	50	36	1
	9317	+64	+12	64	436	1
	9317	+69	+10	69	242	1
	9317	+74	+ 6	74	48	1
	9322	+70	−20	74	97	2
	9322	+80	−20	82	291	4
	9325	+75	+15	75	97	5
	(13)	(205)	(+6)		2,928	62

Mean daily area for 31 days = 1,935
Mean 10 g+s for 31 days = 172.6

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